

WHAT IS CLAIMED IS:

1. A beam current limiting circuit for a video projector comprising:

a cathode current detector for detecting a cathode current of each of a plurality of CRTs used with a video projector;

wherein said cathode current detector is used to adjust a current in a black image (cutoff current) on the CRT and limit a beam current flowing into the CRT.

2. The beam current limiting circuit as claimed in claim 1 wherein said cathode current detector comprises a first resistor being inserted to a cathode current passage of each CRT for detecting a black screen current (cutoff current) and a second resistor inserted to the cathode current passage of each CRT for detecting the beam current flowing into the CRT, the first and second resistors being connected in series.

3. The beam current limiting circuit as claimed in claim 1, further comprising an anode current detector for detecting an anode current of each the CRT, wherein said anode current detector is used to limit the beam current flowing into the CRT.

4. The beam current limiting circuit as claimed in claim 1 wherein when the motion of an image displayed on the CRT is small, said cathode current detector limits the cathode current more than when the motion of an image displayed is large.

5. The beam current limiting circuit as claimed in

claim 1, further comprising an anode current change detector for detecting a change in anode current with a time, wherein when said anode current change detector determines that a change in current is small over a predetermined period of time, said cathode current detector limits the cathode current more.

6. The beam current limiting circuit as claimed in claim 5 wherein said anode current change detector includes an analog/digital converter that inputs an anode current detection signal, and a microcomputer connected to said analog/digital converter.

7. The beam current limiting circuit as claimed in claim 1 wherein said cathode current detector limits the beam current so that a difference between a maximum value and a minimum value of the cathode currents of the CRTs becomes within a predetermined value.

8. The beam current limiting circuit as claimed in claim 1 wherein a beam current limiting range is corrected based on the peak value of the CRT beam current.